What is claimed is:

1. A method of manufacturing a solid-state imaging device comprising the steps of:

forming a plurality of IT-CCDs on a surface of a semiconductor substrate;

bonding a translucent member to the surface of the semiconductor substrate in order to have a gap opposite to each light receiving region of the IT-CCD;

forming an external connecting terminal corresponding to the IT-CCD; and

isolating a bonded member obtained at the bonding step and provided with the external connecting terminal for each of the IT-CCDs.

2. The method of manufacturing a solid-state imaging device according to Claim 1,

wherein the step of bonding a translucent member includes the steps of:

preparing a translucent substrate having a concave portion in a position corresponding to a region in which the IT-CCD is to be formed; and

bonding the translucent substrate to the surface of the semiconductor substrate.

3. The method of manufacturing a solid-state imaging device according to Claim 1, prior to the bonding step,

further comprising the step of:

selectively removing the surface of the semiconductor substrate to surround the light receiving region, thereby forming a protruded portion, a gap being formed between the light receiving region and the translucent member by the protruded portion.

4. The method of manufacturing a solid-state imaging device according to Claim 1,

wherein at the bonding step, a gap is formed between the semiconductor substrate and the translucent member through a spacer provided to surround the light receiving region.

5. The method of manufacturing a solid-state imaging device according to any of Claims 1 to 4,

wherein the isolating step includes the step of separating the translucent member to position a peripheral edge portion of the translucent member onto an inside of a peripheral edge portion of the IT-CCD in such a manner that a surface of a peripheral edge portion of the IT-CCD is exposed from the translucent member.

6. The method of manufacturing a solid-state imaging device according to Claim 1 or Claim 2,

wherein said step of bonding is performed at a

temperature under 80 degrees C.

7. The method of manufacturing a solid-state imaging device according to Claim 6,

wherein, in the bonding step, a room temperature setting adhesive is utilized for bonding the translucent member to the surface of the semiconductor substrate.

8. The method of manufacturing a solid-state imaging device according to Claim 6,

wherein, in the bonding step, a photo-curing adhesive is utilized for bonding the translucent member to the surface of the semiconductor substrate.

9. The method of manufacturing a solid-state imaging device according to Claim 1 or Claim 2, prior to said step of isolating, further comprising the step of:

resin shielding for shielding the translucent member in vicinity of the bonding link with the surface of the semiconductor substrate by a resin so that the external connecting terminal is exposed.

10. The method of manufacturing a solid-state imaging device according to Claim 9,

wherein the resin shielding step is performed at a temperature under 80 degree C.

11. A solid-state imaging device comprising:

a semiconductor substrate provided with an IT-CCD; and

a translucent member connected to the semiconductor substrate in order to have a gap opposite to a light receiving region of the IT-CCD,

wherein a connecting terminal is provided on a surface of the translucent member which is opposed to an attached surface of the semiconductor substrate, and

the connecting terminal is electrically connected to the semiconductor substrate via a through hole provided in the translucent member.

12. The solid-state imaging device according to Claim 11,

wherein the translucent member is connected to the semiconductor substrate through a spacer.

13. The solid-state imaging device according to Claim 12,

wherein the spacer is constituted by the same material as that of the translucent member.

14. The solid-state imaging device according to Claim 12,

wherein the spacer is constituted by the same material as that of the semiconductor substrate.

15. The solid-state imaging device according to Claim 12,

wherein the spacer is constituted by a resin material.

16. The solid-state imaging device according to any of Claims 11 to 14,

wherein the spacer is constituted by a 42-alloy or silicon.

17. A method of manufacturing a solid-state imaging device, comprising the steps of:

forming a plurality of IT-CCDs on a surface of a semiconductor substrate;

bonding a translucent member having a through hole filled with a conductive material on the surface of the semiconductor substrate in order to have a gap opposite to each light receiving region of the IT-CCD; and

isolating a bonded member obtained at the bonding step every IT-CCD.

18. The method of manufacturing a solid-state imaging device according to Claim 17, wherein the step of bonding a

translucent member includes the steps of:

preparing a translucent substrate having a plurality of concave portions in positions corresponding to regions in which the IT-CCDs are to be formed and a through hole in the vicinity of the concave portions; and

bonding the translucent substrate to the surface of the semiconductor substrate.

19. The method of manufacturing a solid-state imaging device according to Claim 18, further comprising:

the step of forming a protruded portion on the surface of the semiconductor substrate to surround the light receiving region prior to the bonding step, a gap being formed between the light receiving region and the translucent member by the protruded portion.

20. The method of manufacturing a solid-state imaging device according to Claim 18,

wherein at the bonding step, a gap is formed between the semiconductor substrate and the translucent member through a space provided to surround the light receiving region.

21. A solid-state imaging device comprising:

a semiconductor substrate provided with an IT-CCD; and

a translucent member connected to the semiconductor substrate in order to have a gap opposite to a light receiving region of the IT-CCD,

wherein the translucent member constitutes an optical member having a condensing function.

22. The solid-state imaging device according to Claim 21,

wherein the translucent member is connected to the semiconductor substrate through a spacer.

23. The solid-state imaging device according to Claim 22,

wherein the spacer is constituted by the same material as that of the translucent member.

24. The solid-state imaging device according to Claim 22,

wherein the spacer is constituted by the same material as that of the semiconductor substrate.

25. The solid-state imaging device according to Claim 22,

wherein the spacer is constituted by a resin material.

26. The solid-state imaging device according to any of Claims 21 to 24,

wherein the spacer is constituted by a 42-alloy or silicon.

27. The solid-state imaging device according to Claim 22,

wherein a surface of a peripheral edge portion of the IT-CCD is exposed from the translucent member.

28. The solid-state imaging device according to Claim 27,

wherein the exposed portion comprises a connecting terminal.

29. A method of manufacturing a solid-state imaging device, comprising the steps of:

forming a plurality of IT-CCDs on a surface of a semiconductor substrate;

bonding an optical member having a condensing function on the surface of the semiconductor substrate in order to have a gap opposite to each light receiving region of the IT-CCD; and

isolating a bonded member obtained at the bonding step every IT-CCD.

30. The method of manufacturing a solid-state imaging device according to Claim 29, wherein the step of bonding a translucent member includes the steps of:

preparing a translucent substrate including a plurality of concave portions in positions corresponding to regions in which the IT-CCDs are to be formed and having a condensing function; and

bonding the translucent substrate to the surface of the semiconductor substrate.

31. The method of manufacturing a solid-state imaging device according to Claim 29, further comprising the step of:

forming a protruded portion on the surface of the semiconductor substrate to surround the light receiving region prior to the bonding step, a gap being formed between the light receiving region and the translucent member by the protruded portion.

32. The method of manufacturing a solid-state imaging device according to Claim 29,

wherein at the bonding step, a gap is formed between the semiconductor substrate and the translucent member through a spacer provided to surround the light receiving region.

33. The method of manufacturing a solid-state imaging device according to any of Claims 29 to 32,

wherein the isolating step includes the step of cutting the translucent member to position a peripheral edge portion of the translucent member on an inside of a peripheral edge portion of the IT-CCD in such a manner that a surface of the peripheral edge portion of the IT-CCD is exposed from the translucent member.

34. A solid-state imaging device comprising:

a first semiconductor substrate provided with an IT-CCD; and

a translucent member having a condensing function which is connected to the first semiconductor substrate in order to have a gap opposite to a light receiving region of the IT-CCD,

wherein a second semiconductor substrate constituting a peripheral circuit is provided on the first semiconductor substrate.

35. The solid-state imaging device according to Claim 34,

wherein the translucent member is connected to the semiconductor substrate through a spacer.

36. The solid-state imaging device according to Claim

35,

wherein the spacer is constituted by the same material as that of the translucent member.

37. The solid-state imaging device according to Claim 35,

wherein the spacer is constituted by the same material as that of the first semiconductor substrate.

38. The solid-state imaging device according to Claim 35,

wherein the spacer is constituted by a resin material filled between the translucent member and the first semiconductor substrate.

39. The solid-state imaging device according to Claim 35,

wherein a surface of a peripheral edge portion of each of IT-CCDs of the first semiconductor substrate is exposed from the translucent member.

40. The solid-state imaging device according to Claim 39,

wherein the exposed portion comprises a connecting terminal.

41. A method of manufacturing a solid-state imaging device, comprising the steps of:

forming a plurality of IT-CCDs on a surface of a first semiconductor substrate;

forming a peripheral circuit on a surface of a second semiconductor substrate;

bonding an optical member having a condensing function on the surface of the first semiconductor substrate and the second semiconductor substrate in order to have a gap opposite to each light receiving region of the IT-CCD; and

isolating a bonded member obtained at the bonding step every IT-CCD.

42. A solid-state imaging device comprising:

a first semiconductor substrate provided with an IT-CCD; and

a translucent member connected to the first semiconductor substrate in order to have a gap opposite to a light receiving region of the IT-CCD,

wherein a second semiconductor substrate having a peripheral circuit formed thereon is provided on a surface opposed to a surface of the first semiconductor substrate on which the IT-CCD is to be formed, and

the peripheral circuit is connected to the IT-CCD via a through hole provided on the first semiconductor

substrate.

43. The solid-state imaging device according to Claim 42,

wherein the first and second semiconductor substrates are bonded to each other directly.

44. The solid-state imaging device according to Claim 42,

wherein the first and second semiconductor substrates are bonded to each other with an adhesive layer in between.

45. The solid-state imaging device according to Claim 42,

wherein the first and second semiconductor substrates are bonded to each other with a heat insulating material in between.

46. The solid-state imaging device according to Claim 42,

wherein the first and second semiconductor substrates are bonded to each other with a magnetic shield material in between.

47. A method of manufacturing a solid-state imaging

device, comprising the steps of:

forming a plurality of IT-CCDs on a surface of a first semiconductor substrate;

forming a peripheral circuit on a surface of a second semiconductor substrate;

bonding a translucent member onto the surface of the first semiconductor substrate in order to have a gap opposite to each light receiving region of the IT-CCD;

bonding the second semiconductor substrate to a back side of the first semiconductor substrate;

forming a through hole on the first semiconductor substrate before or after the bonding step and the semiconductor substrate bonding step and electrically connecting the IT-CCD to a back face of the first semiconductor substrate; and

isolating a bonded member obtained at the bonding step every IT-CCD.

48. The method of manufacturing a solid-state imaging device according to Claim 47,

wherein at the semiconductor substrate bonding step, the first and second semiconductor substrates are bonded to each other by direct bonding.

49. The method of manufacturing a solid-state imaging device according to Claim 47,

wherein at the semiconductor substrate bonding step, the first and second semiconductor substrates are bonded to each other with an adhesive layer in between.